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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/886,030	06/22/2001	Wang Cheng Chung	TTX0166-US	4777

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EXAMINER

HEWITT, JAMES M

ART UNIT

PAPER NUMBER

3679

DATE MAILED: 01/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/886,030	<b>Applicant(s)</b> CHUNG, WANG CHENG	
	<b>Examiner</b> James M Hewitt	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 1-16 and 22-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17, 18 and 21 is/are rejected.
- 7) ☒ Claim(s) 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
           Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
           If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
       a) ☐ All    b) ☐ Some    \* c) ☐ None of:  
           1. ☐ Certified copies of the priority documents have been received.  
           2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
           3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
           \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
       a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election without traverse of Group V in Paper No. 4 is acknowledged.

In Paper No. 2 the Examiner indicated that Group V included claims 17-22. Upon reevaluation, the Examiner has determined that Group V should only include claims 17-21, as claim 22 is drawn to the invention depicted in Figures 8A-C and described on pages 12-13 of the specification. Claim 22 should be included in Group VI with claim 23. Claim 22 contemplates a completely different air pump assembly utilizing electrodes, and as described on pages 12-13 and in claim 23, a sliding mechanism ("slider"). Claims 1-16 and 22-28 are thereby withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected inventions, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 4.

### *Drawings*

The drawings are objected to because in Figure 7C, numeral '731' should instead be '741'. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 21 line 6, "the control pack" lacks antecedent basis. The Examiner suggests replacing "the control pack" with "a control pack". The claim will be treated as if "a control pack" is recited.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Walker (US 4,897,890).

With respect to claim 17, Walker discloses an inflatable product (10), including: a first chamber (18); a first valve (valve 72 associated with button 84A); an air pump (23) for inflating the first chamber through the first valve; a first switch (84A) for activating the air pump and opening the first valve.

With respect to claim 21, further including: a second chamber (19); a second valve (valve 72 associated with button 84) through which the air pump inflates the second chamber; and a control pack (32) having a second switch (84) to activate the air pump to open the second valve. .

Claims 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Horvath et al (US 4,707,027).

With respect to claim 17, Horvath et al discloses an inflatable product, including: a first chamber (8); a first valve (16); an air pump (14) for inflating the first chamber through the first valve; a first switch (22) for activating the air pump and opening the first valve.

With respect to claim 18, further including a switch circuit (see Figures 2 and 3) through which the air pump is activated by the first switch.

#### ***Allowable Subject Matter***

Claims 19 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 19, the prior art found by the Examiner does not disclose, singly or in combination, the inflatable product as claimed in detail in claim 19. Specifically

absent the prior art is a microswitch which is turned on by the first switch (which is for activating the air pump and opening the first valve), and a relay which is activated by the microswitch to supply power to the air pump. The prior art includes switch circuits for inflatable products incorporating microswitches and relay circuits (see US 5,399,166 and US 4,707,027), yet not as claimed in claim 19. Laing ('166) discloses a switch (302) which when turned on activates a microswitch (296). Laing however does not disclose a relay that is activated by the microswitch, and the Examiner has found no motivation or suggestion in Laing to modify Laing's circuit and apparatus with a relay that supplies the air pump with power when the microswitch is turned on. Laing's on/off switch (302) already acts to supply the pump with power. Horvath et al ('027) discloses a switch (22) and switch circuit incorporating a relay (32) which supplies the pump with power. However, Horvath fails to teach or fairly suggest a microswitch which is turned on by the first switch (22) when the first switch is turned on.

Regarding claim 20, the prior art found by the Examiner does not disclose, singly or in combination, the inflatable product as claimed in detail in claim 20. Specifically absent the prior art is the switch circuit for the inflatable product including an air bulb and a pressure switch, wherein the first switch (for activating the air pump and opening the first valve) is turned on to press the air bulb, and the pressure switch is turned on by the air bulb to activate the air pump when the air bulb is pressed by the first switch. The prior art includes switch circuits which utilize pressure switches and air bulbs (pneumatic switches), yet not as claimed in claim 20. Air bulbs were found to be used as pneumatic switches, wherein pressing or squeezing such a bulb would create air

pressure that would activate a switch. However, the Examiner did not find any art which met the limitations requiring the claimed first switch to press an air bulb, which then in turn turned on a pressure switch to activate an air pump when the air bulb was pressed by the first switch.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Laing, Swenson et al, Lepisto, Senoue et al, Bishai, Hollowell et al, Taylor et al, Sember, III, Schild, Mogaki et al, Bruno et al, Chaffee, Volkner, Giffit et al, Wilkerson, Guldager, Cassidy, Greene, Lieberman, and Rogers constitute prior art devices considered by the Examiner to be relevant to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hewitt whose telephone number is 703-305-0552. The examiner can normally be reached on M-F, 930am-600pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on 703-308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9326 for regular communications and 703-872-9327 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

jmh

jmh

January 27, 2003

*James M. Hewitt*

James M. Hewitt  
Patent Examiner  
Technology Center 3600